

GLM:aeh 05/22/06 456712.doc
PATENT

Attorney Reference Number 5437-60780-01
Application Number 09/921,993

REMARKS

Reconsideration of the application is respectfully requested in view of the foregoing amendments and following remarks. Claims 1, 2, 5-12, 15, 17, 21-23, 25-30, 32-34, 37, 40-41, and 43 are pending in the application. No claims have been allowed. Claims 1, 2, 15, 23, 25, 37, 40, and 41 are independent.

Canceled claims are canceled without disclaimer or prejudice to renewal.

Objection to the Claim Numbering

Applicants acknowledge the objection to the claim numbering of claim 43 and have corrected the numbering as advised in the Action.

Objections to Claim Informalities

Applicants have amended the claims in accordance with the informalities listed in the Action.

Presentation of Claims Defining Same Patentable Invention

Applicants hereby identify Patent Application No. 10/410,307, which has claims that are or were identical to (i.e., copied from) Applicants' application.

Cited Art

The Action relies on Kirby et al., "An Analysis of Applying Neural Networks for Employee Selection," 1998 ("Kirby").

The Action also relies on Kemp, "Knowledge-Based Simulation for Teaching," November 1993 ("Kemp").

Patentability of Claims 1, 2, 5-12, 15, 21-23, 25-30, 32-34, 37-41, and 43 over Kirby under § 102(e)

Claims 1 and 5-12

The Action rejects claims 1, 2, 5-12, 15, 21-23, 25-30, 32-34, 37-41, and 43 under 35 U.S.C. § 102(e) as being anticipated by Kirby. Applicants respectfully submit the claims in

GLM:aeh 05/22/06 456712.doc
PATENT

Attorney Reference Number 5437-60780-01
Application Number 09/921,993

their present form are allowable over the cited art. For a 102(e) rejection to be proper, the cited art must show each and every element as set forth in a claim. (See MPEP § 2131.01.) However, the cited art does not so show.

Claim 1 recites:

electronically collecting pre-hire information from a plurality of applicants, wherein at least some of the pre-hire information is collected from at least one of the applicants who responds directly on an electronic device;

For example, the Application at page 10, lines 1 et seq. describes:

For example, pre-hire content (e.g., a job application or skills test) can be presented to an applicant, who responds (e.g., answers questions) directly on the electronic device 124.

Kirby's description of collecting performance appraisal data does not anticipate "electronically collecting pre-hire information from a plurality of applicants" as recited in claim 1. In the rejection, the Action relies on Kirby at page 3, line 1, which describes:

Use of an ANN in the employee selection process could assist the evaluator in an interview situation. Most firms collect performance appraisal data. These historical data can be used to train and test the model by mapping the interview data to performance appraisal data.

Thus, Kirby does describe "mapping the interview data to performance appraisal data." However, Kirby is silent regarding electronic collection. For clarification, Applicants have included language concerning "at least one of the applicants who responds directly on an electronic device." After reviewing Kirby, Applicants conclude that a functioning system was apparently not evaluated the authors. For example, Kirby states, "could assist" at page 3, line 1. Elsewhere, at page 2, line 25, Kirby states, "the neural network model may work better." Because Kirby does not deal with the realities of a functioning system, it is no surprise that Kirby did not contemplate how data would be collected.

For at least these reasons, claim 1 and its dependent claims, 5-12, are allowable over Kirby under § 102.

Claim 2

Claim 2 recites:

A computer-readable medium comprising computer-executable instructions for performing a method . . .

GLM:ach 05/22/06 456712.doc
PATENT

Attorney Reference Number 5437-60780-01
Application Number 09/921,993

Thus, the actions of the method are performed via the computer-executable instructions.

Although the Action points to Kirby as disclosing a computer-readable medium, Kirby fails to describe computer-executable instructions for performing the recited method. For example, Kirby does not describe that computer-executable instructions could be used for “electronically collecting pre-hire information from a plurality of applicants” as recited by claim 2. Therefore, claim 2 is allowable over Kirby.

Claims 15 and 21-22

Claim 15 recites “wherein at least two of the artificial intelligence models are of different types.” At page 8, the Action states that “neural networks can be different, therefore, two types of neural networks can be considered two different types of artificial intelligence model.” Applicants disagree that the word “type” can be read out of the claim. Kirby fails to describe different types of neural networks and therefore fails to anticipate the claim.

For at least these reasons, claim 15 and its dependent claims, 21-22, are allowable over Kirby.

Claim 23

Claim 23 recites “responsive to determining the question is ineffective, deleting the question from the computer-readable medium.” At page 9, the Action cites to page 3, line 18 of Kirby states, “if a question is noisy, it is failure.” At page 3, lines 13 et seq., Kirby describes:

The ability of the artificial neural network to recognize patterns even in the case of noisy data suggests this framework has significant advantages over traditional statistical models.

Thus, Kirby does describe that neural networks can recognize patterns even in the case of noisy data. However, as understood by Applicants, any description of deleting a question is absent from Kirby.

Kirby also describes success and failure at page 3, lines 17-19:

As a potential benefit to employees, the neural network model is expected to predict relative success and failure for potential candidates given the success of those who have come before.

GLM:ash 05/22/06 456712.doc
PATENT

Attorney Reference Number 5437-60780-01
Application Number 09/921,993

Although Kirby does describe "failure for potential candidates," it does not describe failure of a question or that a question would be determined as ineffective, let alone that such a question would be deleted.

Accordingly, claim 23 is allowable over Kirby under § 102.

Claims 25, 26-30, and 32-34

Claim 25 recites:

wherein the one or more predicted job effectiveness criteria comprise at least one selected from the group consisting of:
tenure, number of accidents, sales level, whether the job applicant will be involuntarily terminated, whether the job applicant will be eligible for rehire upon termination, sales produced, units produced, attendance, number of disciplinary incidents, dollar sales per hour, promotions, salary increases, probationary survival, and completion of training programs.

For example, the Application describes such criteria at page 3, lines 25 et seq.; page 11, lines 23 et seq.; page 12, lines 2 et seq.; and page 20, lines 20 et seq. As understood by Applicants, Kirby fails to describe the recited criteria. Accordingly, claim 25 and its dependent claims, 26-30 and 32-34, are allowable over Kirby.

Claims 37 and 43

Claim 37 recites "wherein the pre-hire data is based on a question set refined by having identified and removed one or more questions as ineffective." The Action relies on Kirby's description of success and failure at page 3, lines 17-19:

As a potential benefit to employees, the neural network model is expected to predict relative success and failure for potential candidates given the success of those who have come before.

Although Kirby does describe "failure for potential candidates," it does not describe failure of a model or that a question would be identified as ineffective, let alone that such a question would be removed.

Accordingly, claim 37 and its dependent claim, 43, are allowable over Kirby.

GLM:ach 05/22/06 456712.doc
PATENT

Attorney Reference Number 5437-60780-01
Application Number 09/921,993

Claim 40

Claim 40 recites, “electronic data interrogator means for presenting a first set of a plurality of means for questioning to the individual.” The Action cites to page 3, line 1 of Kirby which describes:

Use of an ANN in the employee selection process could assist the evaluator in an interview situation. Most firms collect performance appraisal data.

Thus, Kirby does describe, “Most firms collect performance appraisal data.” However, Kirby is silent regarding an electronic data interrogator means that presents means for questioning to an individual as recited by claim 40. Accordingly, claim 40 is allowable over Kirby.

Claim 42

Claim 42 now explicitly recites the language from claim 25 and is therefore allowable for at least the reasons stated for claim 25.

Patentability of Claim 17 over Kirby and Kemp under § 103

The Action rejects claim 17 under 35 U.S.C. § 103(a) as unpatentable over Kirby and Kemp. Claim 17 depends from claim 15. As understood by Applicants, Kemp fails to supply the description missing from Kirby regarding “wherein at least two of the artificial intelligence models are of different types.” Accordingly, claim 17 is allowable over a Kirby-Kemp combination.

For at least these reasons, claim 17 is allowable at this time.

Request for Interview

If any issues remain, the Examiner is formally requested to contact the undersigned attorney prior to issuance of the next Office Action in order to arrange a telephonic interview. It is believed that a brief discussion of the merits of the present application may expedite prosecution. Applicants submit the foregoing formal Amendment so that the Examiner may fully evaluate Applicants' position, thereby enabling the interview to be more focused.

This request is being submitted under MPEP § 713.01, which indicates that an interview may be arranged in advance by a written request.

GLM:neh 05/22/06 456712.doc
PATENT

Attorney Reference Number 5437-60780-01
Application Number 09/921,993

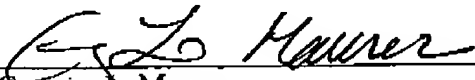
Conclusion

The claims in their present form should now be allowable. Such action is respectfully requested.

Respectfully submitted,

KLARQUIST SPARKMAN, LLP

By


Gregory L. Maurer

Registration No. 43,781

One World Trade Center, Suite 1600
121 S.W. Salmon Street
Portland, Oregon 97204
Telephone: (503) 226-7391
Facsimile: (503) 228-9446